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Access to electricity in rural Africa - from donor support to innovative business models

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The traditional model of rural electrification in Sub-Saharan Africa (SSA) mainly involves donor and government-supported programs. Recently, however, a rapid and significant increase has occurred in the sale of pico-scale solar products throughout SSA. This development is driven by an increasing number of private firms supplying pico-scale solar systems to customers, on a commercial basis, in order to serve their electricity and lighting needs. The system suppliers take advantage of the substantial improvement in the price and efficiency of core technology components, the emergence of smart metering technologies, and the wide spread use of mobile phones and mobile payment schemes. Suppliers are, thus, able to target poor customers located mainly in off-grid, rural areas through new pay-as-you-go business models that avoid high upfront costs. With the parallel rise in the costs of conventional sources of electricity and lighting, especially diesel and kerosene, the demand for pico-scale solar appliances has boomed. These factors are driving a remarkable and unprecedented diffusion of pico-scale solar PV products on market terms, which stands in contrast to the donor and government-driven model of rural electrification

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